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1270 Aberdeen St
Hawkesbury, ON
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Canada

Tel (613) 632-5200
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D117-762-041
Job Sheet 201677



Part No: D117-762-041

Job Qty: 1 pcs

Part Name: Replacement Skidtube



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 10/8/19

Job Tracking No:

Due Date: 10/29/19

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG D3582 REV E IPP Rev:A 07.06.11 New Issue EC IPP Rev:B 08-02-22 change to revA as per dwg DD verF by:EC IPP REV:C 15.06.11 AS PER CHG002 DD VERF:JLM IPP REV:D 16.02.05 DWG REV.C (ecn16-514)DD VERF:JLM IPP REV:E 17.01.17 as per dwg REV.D DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
130	Skidtubes - 1	1 pcs	10/29/19		0.00	3.30	Skidtubes - 1		D11
							Skidtubes - 2		
							Skidtubes - 3		
							Skidtubes - 4		
							Skidtubes - 5		
							Skidtubes - 6		
							Skidtubes - 7		
140	Skidtubes - 2 - B4B	1 pcs	10/29/19		0.00	3.30	Skidtubes - 1 - B4B		B4B
							Skidtubes - 2 - B4B		
							Skidtubes - 3 - B4B		
							Skidtubes - 4 - B4B		
							Skidtubes - 5 - B4B		
							Skidtubes - 6 - B4B		
							Skidtubes - 7 - B4B		
150	QC 10	1 pcs	10/29/19		0.00	0.00	QC 10 - 10		DAS NOV 06 2019 68 9-89
							QC 10 - 18		
							QC 10 - 24		
							QC 10 - 43		
							QC 10 - 50		
							QC 10 - 58		
							QC 10 - 9		
							QC 10 - 68		
160	QC 5	1 pcs	10/29/19		0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		

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					QC 5 - 43	
					QC 5 - 49	
					QC 5 - 51	
					QC 5 - 58	
					QC 5 - 68	DAS NOV 06 2019 68
					QC 5 - 9	9-89
					QC 5 - 50	
					QC 5 - 30	
					QC 5 - 40	
					QC 5 - 61	
					QC 5 - 81	
170 Handfinish - 1-1 Chemical-B4B	1 pcs	10/29/19	0.00	0.97	Handfinish - 1 - 1 - B4B	BFB19-4-06
					Handfinish - 1 - 2 - B4B	
					Handfinish - 1 - 3 - B4B	
					Handfinish - 1 - 4 - B4B	
					Handfinish - 1 - 5 - B4B	
					Handfinish - 1 - 6 - B4B	
					Handfinish - 1 - 7 - B4B	
					Handfinish - 1 - 8 - B4B	
					Handfinish - 1 - 9 - B4B	
					Handfinish - 1 - 10 - B4B	
					Handfinish - 1 - 11 - B4B	
					Handfinish - 1 - 12 - B4B	
					Handfinish - 1 - 13 - B4B	
					Handfinish - 1 - 14 - B4B	
					Handfinish - 1 - 15 - B4B	
					Handfinish - 1 - 16 - B4B	
					Handfinish - 1 - 17 - B4B	
					Handfinish - 1 - 18 - B4B	
					Handfinish - 1 - 19 - B4B	
					Handfinish - 1 - 20 - B4B	
					Handfinish - 1 - 21 - B4B	
					Handfinish - 1 - 22 - B4B	
180 QC 7	1 pcs	10/29/19	0.00	0.00	QC 7 - 10	
					QC 7 - 13	
					QC 7 - 14	
					QC 7 - 15	
					QC 7 - 17	
					QC 7 - 18	
					QC 7 - 19	
					QC 7 - 2	
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					QC 7 - 28	
					QC 7 - 3	
					QC 7 - 30	
					QC 7 - 34	
					QC 7 - 36	
					QC 7 - 37	
					QC 7 - 41	
					QC 7 - 47	
					QC 7 - 48	
					QC 7 - 51	
					QC 7 - 58	
					QC 7 - 59	
					QC 7 - 60	
					QC 7 - 9	
					QC 7 - 68	
					QC 7 - 50	
					QC 7 - 67	
					QC 7 - 40	
					QC 7 - 24	
					QC 7 - 43	
190 Skidtubes - 3 - B4B	1	10/29/19	0.00 3.33		QC 7 - 61	
					QC 7 - 81	
					QC 7 - 76	
					QC 7 - 79	
					Skidtubes - 1 - B4B	
					Skidtubes - 2 - B4B	
					Skidtubes - 3 - B4B	
200 QC 10	1	10/29/19	0.00 0.00		Skidtubes - 4 - B4B	
					Skidtubes - 5 - B4B	
					Skidtubes - 6 - B4B	
					Skidtubes - 7 - B4B	
					QC 10 - 10	
					QC 10 - 18	
					QC 10 - 24	
210 QC 5	1	10/29/19	0.00 0.00		QC 10 - 43	
					QC 10 - 50	
					QC 10 - 58	
					QC 10 - 9	
					QC 10 - 68	
					QC 5 - 10	
					QC 5 - 12	
					QC 5 - 17	
					QC 5 - 18	
					QC 5 - 19	
					QC 5 - 22	
					QC 5 - 24	
					QC 5 - 3	
					QC 5 - 43	
					QC 5 - 49	
					QC 5 - 51	
					QC 5 - 58	
					QC 5 - 68	
					QC 5 - 9	
					QC 5 - 50	
215 Handfinish - 2-1 Pressure-	1	10/29/19	0.00 0.97		QC 5 - 30	
					QC 5 - 40	
					QC 5 - 61	
					QC 5 - 81	
					Handfinish - 2 - 1 -	

DB

BE

DAS
NOV 11 2019 68
9-89DAS
NOV 11 2019 68
9-89

BEB 19-11-11

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B4B		pcs				B4B	
						Handfinish - 2 - 2 - B4B	
						Handfinish - 2 - 3 - B4B	
						Handfinish - 2 - 4 - B4B	
220	Powdercoat - 1 White GI(A)- B4B	1 pcs	10/29/19	0.00	0.26	Powdercoat - 1 - B4B	
						Powdercoat - 2 - B4B	
						Powdercoat - 3 - B4B	
						Powdercoat - 4 - B4B	
230	QC 3	1 pcs	10/29/19	0.00	0.00	QC 3 - 10	
						QC 3 - 13	
						QC 3 - 15	
						QC 3 - 17	
						QC 3 - 18	
						QC 3 - 2	
						QC 3 - 28	
						QC 3 - 3	
						QC 3 - 30	
						QC 3 - 34	
						QC 3 - 36	
						QC 3 - 41	
						QC 3 - 51	
						QC 3 - 58	
						QC 3 - 59	
						QC 3 - 68	
						QC 3 - 9	
						QC 3 - 40	
						QC 3 - 19	
						QC 3 - 43	
						QC 3 - 24	
						QC 3 - 61	
						QC 3 - 81	
250	Handfinish - 4-1-Assembly- B4B	1 pcs	10/29/19	0.00	0.97	Handfinish - 4 - 1 - B4B	
						Handfinish - 4 - 10 - B4B	
						Handfinish - 4 - 11 - B4B	
						Handfinish - 4 - 12 - B4B	
						Handfinish - 4 - 13 - B4B	
						Handfinish - 4 - 14 - B4B	
						Handfinish - 4 - 15 - B4B	
						Handfinish - 4 - 2 - B4B	
						Handfinish - 4 - 3 - B4B	
						Handfinish - 4 - 4 - B4B	
						Handfinish - 4 - 5 - B4B	
						Handfinish - 4 - 6 - B4B	
						Handfinish - 4 - 7 - B4B	
						Handfinish - 4 - 8 - B4B	

BL 19-11-14.

3EB 19-11-14.

3EB 19-11-14.

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59
9-89

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				Handfinish - 4 - 9 - B4B	
260 QC 5	1 pcs	10/29/19	0.00 0.00	QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	
270 Packaging 3-1 - Stock - B4B	1 pcs	10/29/19	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
275 DC - 1 - B4B	1 pcs	10/29/19	0.00 0.00	DC - 1 - B4B	
				DC - 2 - B4B	

DAS
NOV 20 2019 68
9-89

NL 21/11/19

DAS
21 NOV 21 2019
9-89

280 QC 21 - FG	1 pcs	10/29/19	0.00 0.00	QC 21 - FG - 21	DAS
				QC 21 - FG - 70	21
				QC 21 - SA - 53	NOV 21 2019

Part Op 130 - Skidtubes-1 (Skidtubes) 1-Cut Aft end using DT8185 2-Deburr ends 3-Drill Aft Cap holes using DT8678 *** OPEN
 Descriptions: AFT CAP HOLE TO .187" *** 4-Locate DT 8973 from aft cap holes & Drill Ground wire hole on top of Tube. 5-Install 3/16
 cleco in Ground wire hole ,then drill all X-Bolt holes using 3/16" drill. 6-Drill pilot holes for wearplates using DT8900 7-
 Open wearplate holes to Ø19/64" (0.297") as per Dwg D3582. 8-Drill holes for D5520-1 doubler using DT10309 A & B,
 locating from 4th and 5th crossbolt holes from aft using .1875 clekos. Spot drill tube using #20 drill (note 10). Remove
 DT10309 B. Re-install DT 10309 A drill thru tube and doubler using #20 drill (note 10), cleko as you go. Remove .1875
 clekos and open holes in tube and doubler to 0.750". Remove doublers and identify orientation. 9-Deburr doubler and
 doubler holes in skid tube. 10-Countersink doubler holes in skid tube as per Dwg. detail J and note 12 -Touch up alodine
 on D5520-1 doublers. 11- open ground wear holes to 0.391" as per section B-B 12-Open Aft Cap holes using .209" drill.
 13-Drill pilot holes for section D-D and E-E. Holes must be laid out by hand. Mark out Center line and make sure that 6.65
 and 5.906 measurements are respected. Double check before drilling, do not open holes to finish size. 12-Do not open
 holes of section G-G to finishes size.

140 - Skidtubes-1 (Skidtubes) 1-Weld fwd cap D2964 per dwg D3582 and QSI 004 A/R AL ROD

Batch: 138189 13911 2-Grind flush

150 - QC10 (QC10- Inspect visual per QSI004- ground welds)

160 - QC5 (QC5- Inspect part completeness to step on W/O)

170 - HandFinish1 (Chemical Conversion Coat per QSI005 4.1)

180 - QC7-1 (QC7-Inspect Chemical Conversion Coat)

190 - Skidtubes-1 (Skidtubes) ***MASK OFF HOLES OF SECTION F-F (DO NOT C'SINK) 1-Open X-Bolt holes to finish
 size as per Dwg D3582, sections D-D, E-E, G-G as per Dwg. 2-Counter Sink X-BOLT holes as per Dwg D3582 D-D, E-E
 and G-G.***Do NOT countersink holes of section F-F). 3-Deburr and blow out chips from inside of tube, prep. tube for
 welding. 4-Install doublers using DT10309 B. Shave rivets as required. 5-Bond web as per Dwg D3582 & QSI 015 A/R
 241 Sika Flex Batch: 520065 Exp Date: 6/12/2020 6- Swage x-bolt spacer as per dwg and

Section F-F QSI002. 7-Weld x-bolt spacers as per Dwg D3582 section D-D, E-E and G-G. A/R AL ROD

Batch: 138189 8-Grind welds flush

200 - QC10 (QC10- Inspect visual per QSI004- ground welds)

210 - (QC5- Inspect part completeness to step on W/O)

215 - HandFinish2 (Pressure Wash per QSI005 4.3/ Clean and remove all markings) Touch-up alodine as per QSI

220 - Powdercoat1 (White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum) START TIME 8:40. OVEN TEMPERATURE:

FINISH TIME: 9:12 M21 886.

230 - (QC3- Inspect Part Finish)

250 - HandFinish4 (Assemble as per dwg) 1-Inspect for Foreign objects 2-Install Aft cap as per Dwg D3582, Detail "C"

A/R 241 Sika Flex Batch: 5200625 Exp Date: 20/07 3-Install Wearplates as per Dwg D3582 ,

Note:Install Bolt and washer on Ground Wire inserts on top of tube see section D-D of dwg D3582 *****Do not install
 bolts where indicated on Dwg(Note #6)***** 4- Wing Walk as per Dwg D3582 and QSI 005 4.4

260 - (QC5- Inspect part completeness to step on W/O)

270 - Identify and pack for shipping as per PPP D117-762-041 Location :FG081

275 - (Document Control) Photocopy bluefile & type labels per PPP D117-762-041 CHG003

280 - (QC21- Final Inspection - Work Order Release)

Wing walk Batch 5209362

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D3582-1-BENT	Skidtube Assembly BK117	1 pcs (1 ea)	130-Skidtubes - 1	5221590
D5520-1	Doubler	2 pcs (2 ea)	130-Skidtubes - 1	5218923
D2964	Cap	1 pcs (1 ea)	140-Skidtubes - 2 - B4B	5146305
CR3212-5-05	Rivet	68 pcs (68 ea)	190-Skidtubes - 3 - B4B	5225043x60
D2971	Cross Bolt Spacer	1 pcs (1 ea)	190-Skidtubes - 3 - B4B	5097024
D3584-1	Web	1 pcs (1 ea)	190-Skidtubes - 3 - B4B	5174779
D3662-1	Crossbolt Spacer	3 pcs (3 ea)	190-Skidtubes - 3 - B4B	5173644
D3662-3	Crossbolt Spacer	1 pcs (1 ea)	190-Skidtubes - 3 - B4B	5173644
D5304-1	Crossbolt Spacer	2 pcs (2 ea)	190-Skidtubes - 3 - B4B	5173644
ALS4-1032-130	Rivnut	36 Ea (36 ea)	250-Handfinish - 4-1-Assembly-B4B	5057257
ALS4-428-165	Insert	2 Ea (2 ea)	250-Handfinish - 4-1-Assembly-B4B	5147561
AN3-5A	Bolt	2 Ea (2 ea)	250-Handfinish - 4-1-Assembly-B4B	5216385
AN3C4A	Bolt	28 Ea (28 ea)	250-Handfinish - 4-1-Assembly-B4B	5228822
AN4-4A	Bolt	2 Ea (2 ea)	250-Handfinish - 4-1-Assembly-B4B	5166570
D2965	Cap	1 pcs (1 ea)	250-Handfinish - 4-1-Assembly-B4B	5172981
D3508-11	Wearplate Aft Center	1 pcs (1 ea)	250-Handfinish - 4-1-Assembly-B4B	5172983
D3508-13	Wearplate Aft	1 pcs (1 ea)	250-Handfinish - 4-1-Assembly-B4B	5172576
D3508-3	Wearplate Fwd Center	1 pcs (1 ea)	250-Handfinish - 4-1-Assembly-B4B	5172972
D3508-9	Wearplate Fwd	1 pcs (1 ea)	250-Handfinish - 4-1-Assembly-B4B	5210680
D3558-11	Gasket Aft Center	1 pcs (1 ea)	250-Handfinish - 4-1-Assembly-B4B	5224210
D3558-13	Gasket Aft	1 pcs (1 ea)	250-Handfinish - 4-1-Assembly-B4B	5210684
D3558-3	Gasket Center Fwd	1 pcs (1 ea)	250-Handfinish - 4-1-Assembly-B4B	5210682
D3558-9	Gasket Fwd	1 pcs (1 ea)	250-Handfinish - 4-1-Assembly-B4B	5218154
NAS1149C0332R	Washer (AN960C10L)	28 Ea (28 ea)	250-Handfinish - 4-1-Assembly-B4B	5178328
NAS1149D0332J	Washer	2 Ea (2 ea)	250-Handfinish - 4-1-Assembly-B4B	5178328
NAS1149D0416J	Washer	2 Ea (2 ea)	250-Handfinish - 4-1-Assembly-B4B	5178328

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
130-Skidtubes - 1	D3582-1-BENT	1	3	0
	D5520-1	2	42	0
140-Skidtubes - 2 - B4B	D2964	1	22	0
190-Skidtubes - 3 - B4B	CR3212-5-05	68	444	0
	D2971	1	63	0
	D3584-1	1	5	0
	D3662-1	3	119	0
	D3662-3	1	36	0
	D5304-1	2	37	0
250-Handfinish - 4-1-Assembly-B4B	ALS4-1032-130	36	5,708	0
	ALS4-428-165	2	68	0
	AN3-5A	2	266	0
	AN3C4A	28	1,464	0
	AN4-4A	2	37	0
	D2965	1	50	0
	D3508-11	1	11	0
	D3508-13	1	7	0
	D3508-3	1	14	0
	D3508-9	1	12	0
	D3558-11	1	11	0
	D3558-13	1	3	0
	D3558-3	1	12	0
	D3558-9	1	12	0
	NAS1149C0332R	28	3,974	0
	NAS1149D0332J	2	1,265	0
	NAS1149D0416J	2	1,739	0

Part Specifications

Specifications could not be found.

ITEM	Qty	Part Number	Description
	X	D3882-041	SKIDTUBE ASSEMBLY
1	1	D2882-150	EXTRUSION
2	1	D2884	CAP
3	1	D2885	CAP
4	1	D2871	CROSS BOLT SPACER
5	1	D3508-3	WEARPLATE
6	1	D3508-8	WEARPLATE
7	1	D3508-11	WEARPLATE
8	1	D3508-13	WEARPLATE
9	1	D3508-3	GASKET
10	1	D3508-8	GASKET
11	1	D3508-11	GASKET
12	1	D3508-13	GASKET
13	1	D3584-1	WEB
14	3	D3882-1	CROSS BOLT SPACER
15	1	D3882-3	CROSS BOLT SPACER
16	2	D3904-1	DOUBLER
17	2	D5520-1	BOLT
18	28	AN304A	BOLT
19	2	AN3-5A	BOLT
20	2	AN4-4A	BOLT
21	28	NAS1148C0332R	WASHER (AN860C10L)
22	2	NAS1148D0332J	WASHER (AN860JD10L)
23	2	NAS1148D0416J	WASHER (AN860JD416L)
24	36	AEL5-1032-130	INSERT
25	2	AL57-428-105	INSERT
26	88	CR3212-5-05	CSK RIVET, CHERRY MAX

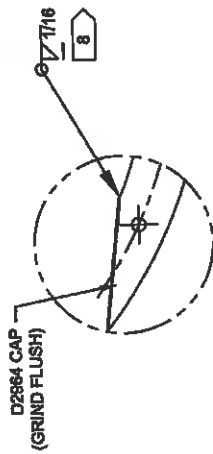
NOTES:
1) MATERIAL: N/A
2) FINISH: CHEMICAL CONVERSION COAT PER QSI 005 4.1 PRIOR TO INSERTING D3584-1 WEB.
3) TOLERANCES: PER DART QSI 016 UNLESS OTHERWISE NOTED.
4) ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART QSI 005 4.4
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: N/A
7) WEIGHT: 16.2 lbs
8) WELDING: PER DART QSI 004.
9) INSERT D3584-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/281 ADHESIVE PER DART QSI 015 AFTER BENDING.
10) USE DART DRILL TEMPLATE DT8900 TO LOCATE AND DRILL Ø0.287 HOLES (36 PLACES) FOR WEARSHOE INSERTS. INSTALL WEARSHOE INSERTS WITH SIKAFLEX-241/281.
11) DO NOT INSTALL AN304A BOLTS AND NAS1148C0332R WASHERS IN INDICATED LOCATIONS
12) LOCATE QTY (34) HOLES ONTO THE SKIDTUBE PER D5520-1 DOUBLER AND DRILL Ø0.181 THRU SKIDTUBE AND DOUBLER USING DT10308.
COUNTERSINK Ø0.286 x 100° (34 PL) PER DOUBLER AND INSTALL EACH D5520-1 DOUBLER USING QTY (34) CR3212-5-05 CSK RIVETS.

RELEASED
2017-08-11
6217-547

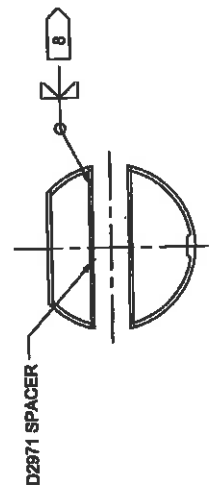
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RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 201677 M/S
19-10-08

E	MOVE VIEWS FROM SHT 1 TO SHT 2. ADD ITEMS 17 & 26 AND NOTE 12-13. Ø0.187 HOLE WAS Ø0.175. ADD SHT 3. ADD DETAIL J SECTION F-F ADD D5520-1. SCALE ON VIEWS WAS 3X.	AJS	17.03.27
D	D3904-1 WAS D2873; REVISE BOM & SECTION F-F & SECTION NOTES (2N B7-3, AS-3); REF NCR15-8160	RF	17.01.09
C	D3482 PLUG ASSEMBLIES REMOVED. REFORMAT NOTES SHT 1	AP	16.11.02
B	20.00 WAS 20.07 (2N C2-1). INCORPORATED DEO D3582-A-1 (2N D5-1). FORMAT TO CURRENT STD	RF	16.02.20
A	NEW ISSUE	PH	07.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN	PH		
DRAWN	AJS		
CHECKED	EUGENE OR		
MFG. APPR.	D3582		
APPROVED	TITLE		
DE APPR.	BK 117 SKIDTUBE ASSEMBLY		
DATE	17.03.27		

DART AEROSPACE USA, INC	REV. E
EUGENE OR	SHEET 1 OF 4
DRAWING NO.	SCALE
D3582	NTS
TITLE	
BK 117 SKIDTUBE ASSEMBLY	
DATE	

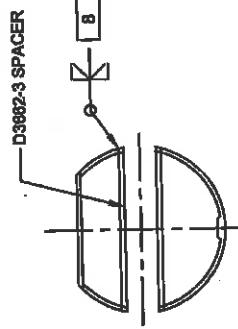


DETAIL C
SCALE 4X



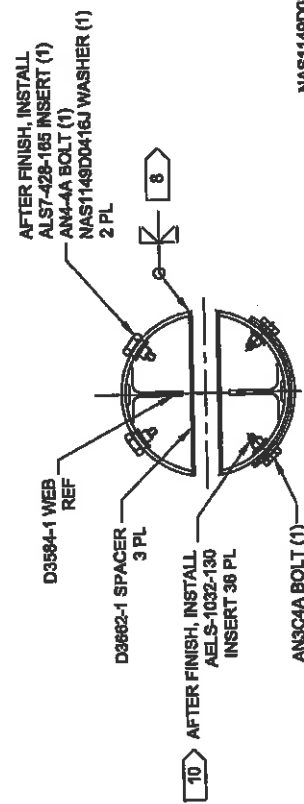
SECTION D-D
SCALE 4X

- SECTION D-D NOTES**
AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:
1. CHAMFER HOLE 0.030 x 45°
 2. INSERT D2871 SPACER
 3. WELD INTO PLACE AND GRIND FLUSH
 4. PASS Ø0.750 DRILL TO REMOVE SPILL OVER



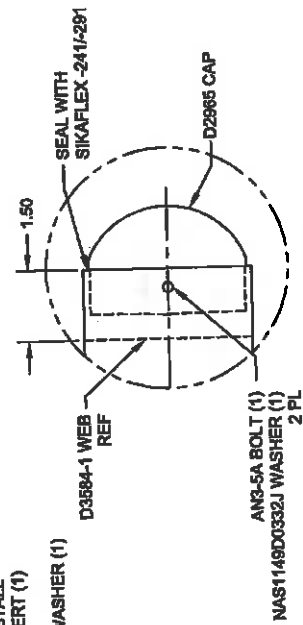
SECTION E-E
SCALE 4X

- SECTION E-E NOTES**
AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:
1. CHAMFER HOLE 0.030 x 45°
 2. INSERT D3882-3 SPACER
 3. WELD INTO PLACE AND GRIND FLUSH
 4. PASS Ø0.872 DRILL TO REMOVE SPILL OVER

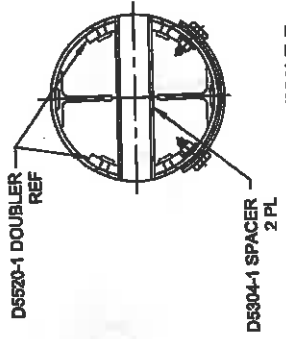


SECTION G-G
SCALE 4X

- SECTION G-G NOTES**
AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:
1. CHAMFER HOLE 0.030 x 45°
 2. INSERT D3882-1 SPACER (3 PLACES)
 3. WELD INTO PLACE AND GRIND FLUSH
 4. PASS Ø0.515 DRILL TO REMOVE SPILL OVER



DETAIL H
SCALE 4X



SECTION F-F
SCALE 4X

- SECTION F-F NOTES**
AFTER BENDING AND DRILLING ASSY
PERFORM THE FOLLOWING:
1. INSERT D5304-1 SPACER
 2. SWAGE TO Ø0.565 ±0.005/Ø0.000 X 1.0 DEEP PER QSI 002
 3. OPEN THRU HOLE TO Ø0.825
 4. GRIND FLUSH

DESIGN	PH	DART AEROSPACE USA, INC
DRAWN	AJS	EUGENE, OR
CHECKED	WJL	DRAWING NO. D3582
INFG. APPR.	WJL	REV. E SHEET 3 OF 4
APPROVED	WJL	SCALE NTS
DE APPR.	WJL	TITLE BK 117 SKIDTUBE ASSEMBLY
DATE	17.03.27	COMP. PROJECT 15 2017 BY DART AEROSPACE USA, INC

RELEASED
R 2017-08-11

Date:

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No.

Route update only



Job: _____ Part No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐		DEPARTMENT/PROCESS Skid-tube ☐ Cross tube ☐ Eng. (Non-AW) ☐ Engineering ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Water Jet ☐ Large Fab ☐ Finishing ☐ Rec/Store/Packaging ☐ Supplier ☐ Quality ☐				Date : _____ Sequence #: _____ QTY Affected : _____ MRB (QSI042) _____																											
Description Work Order Deviation		Disposition		Completed By																															
_____		_____		Lead hand / Supervisor																															
_____		_____		QC / QA Coordinator																															
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY <table border="1"> <tr> <td>Pressure/Forced</td> <td>Contamination</td> <td>Power Loss/Surge</td> <td>Positioned Wrong</td> </tr> <tr> <td>Bending</td> <td>Misaligned/off center</td> <td>Folio/Program</td> <td>Outside Tolerance</td> </tr> <tr> <td>Crushing</td> <td>BOM/Route</td> <td>Grain Direction</td> <td>Drawing</td> </tr> <tr> <td>Cracks</td> <td>Broken/Damage/Defect</td> <td>Weld</td> <td>Finish</td> </tr> <tr> <td>Crimp/Kink/Ripple/Wave/Twist</td> <td>Incomplete/Unclear Instructions</td> <td>Wrong Stock Pulled</td> <td>Part Lost/Missing</td> </tr> <tr> <td>Marks/Chatter</td> <td>Drill Holes</td> <td>Out of Sequence</td> <td>Misread</td> </tr> <tr> <td>Mislabeled</td> <td>Fit/Function</td> <td>Off-set/Set-up</td> <td></td> </tr> </table> Other/Details: _____						Pressure/Forced	Contamination	Power Loss/Surge	Positioned Wrong	Bending	Misaligned/off center	Folio/Program	Outside Tolerance	Crushing	BOM/Route	Grain Direction	Drawing	Cracks	Broken/Damage/Defect	Weld	Finish	Crimp/Kink/Ripple/Wave/Twist	Incomplete/Unclear Instructions	Wrong Stock Pulled	Part Lost/Missing	Marks/Chatter	Drill Holes	Out of Sequence	Misread	Mislabeled	Fit/Function	Off-set/Set-up	
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